5

10

ABSTRACT OF THE INVENTION

A filtering face mask that includes a mask body and an exhalation valve. The mask body is adapted to fit at least over the nose and mouth of a wearer to create an interior gas space when worn, and the exhalation valve is in fluid communication with the interior gas space. The exhalation valve comprises a valve seat that has a seal surface and an orifice through which an exhale flow stream may pass to leave the interior gas space. A flexible flap is mounted to the valve seat such that the flap makes contact with the seal surface when the valve is in its closed position and such that the flap can flex away from the seal surface during an exhalation to allow exhaled air to pass through the orifice to ultimately enter an exterior gas space. The flexible flap has at least first and second juxtaposed layers where at least one of the layers is stiffer or has a different elastic modulus than the other layer.